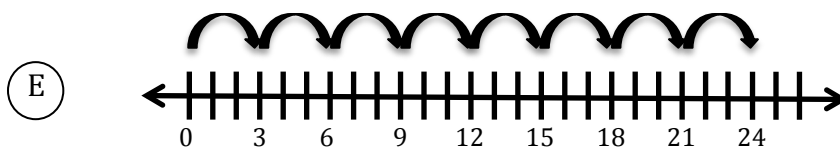
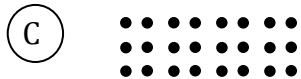


Indicate which models below represent  $4 \times 6$ .

(A) 4, 8, 12, 16, 20, 24



**Scoring:**

2 points: Selected A, B and D only.

1 point: Selected either A and B, A and D, or B and D only.

Selected either A and B, A and D, or B and D and only one other wrong answer.

0 points: Any other combination.

**Key and Distractor Analysis:**

A. Key. Skip counting by four six times.

B. Key. Six groups of four objects each.

C. An array that does show 24, but not  $4 \times 6$ , rather  $3 \times 8$ .

D. Key. Four groups of six objects each.

E. A number line that ends at 24, but skips three eight times not four six times, or six four times.

**Operations and Algebraic Thinking**

**3.OA**

**Represent and solve problems involving multiplication and division.**

1. Interpret products of whole numbers, e.g., interpret  $5 \times 7$  as the total number of objects in 5 groups of 7 objects each, **or 7 groups of 5 objects each**. For example, describe a context in which a total number of objects can be expressed as  $5 \times 7$ .